ABSTRACT

A rotary object feeder comprises a sun member having a sun axis and being rotatable about a sun axis of rotation at a rotational speed of W1. The feeder also has a planetary member mounted for connection to the sun member, the planetary member having a planetary axis located at a constant distance X from the sun axis. The planetary member is rotatable about the planetary axis of rotation and is also mounted for rotation around the sun axis with the sun member. The planetary member is rotated about the planetary axis at a rotational speed of W3 which is opposite in direction to W1. N pick-up members are mounted on the planetary member, where N is an integer greater than or equal to 3. The pick up members are rotatable with the planetary member about the planetary axis and rotate with the planetary member around the sun axis. The pick-up members are driven about the planetary axis and the sun axis such that the pick-up locations of the pick-up members follow a common cyclical path having M apexes, wherein M = (N+1), and W3 is equal in magnitude to (M/N) x W1.